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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,740	04/14/2004	James J. Robinson	033679-532	4901

21839 7590 04/20/2006

BUCHANAN INGERSOLL PC  
(INCLUDING BURNS, DOANE, SWECKER & MATHIS)  
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EXAMINER
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ADDISU, SARA

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/823,740	ROBINSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sara Addisu	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This Office Action is in response to the amendment filed 1/6/06. Claim 21 has been cancelled. Claims 22-26 are pending in this Application.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

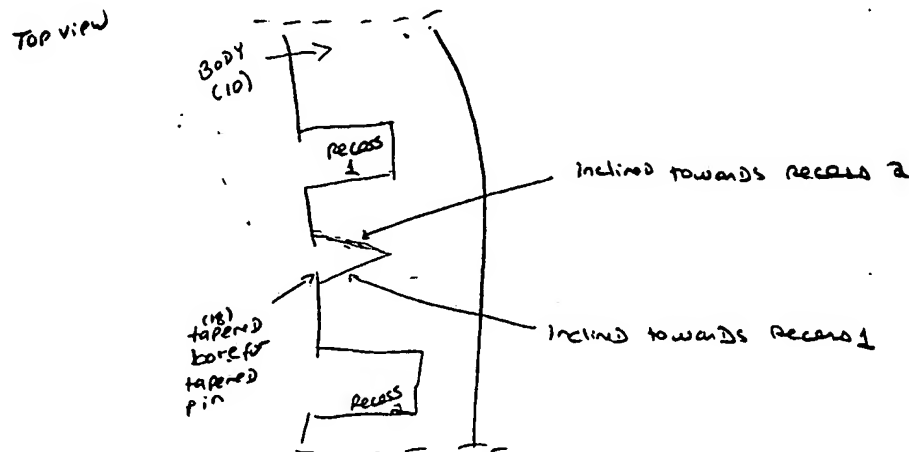
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kelly et al. (U.S. Patent No. 2,503,951).

Kelly et al. teaches in Figure 5, a tool body (23) for a rotatable cutting tool having at least one recess (24) with a first and second opposing walls for releasably retaining a replaceable insert (25 with exposed cutting edge), an isolating channel/slot (17) spaced from the recess to define an elastically deformable leaf there between, wherein the first wall of the recess is formed by the leaf. Kelly et al. also teaches a tapered pin (leaf bending element) (19) adjustable within the isolating channel for elastically bending the leaf from a relaxed position to a clamping position wherein the first wall clamps the insert against the second wall. Furthermore, Kelly et al. teaches in Figure 5, first wall that is inclined at a shallow angle relative to the second wall and when the leaf is in the relaxed position, the first wall diverges from the second wall in a direction away from an

Art Unit: 3722

open end of the recess (('951, Col. 3, lines 45-56). Kelly et al also teaches tapered bore (18) which is part of the isolation channel (17) therefore each side of the taper is inclined at a shallow (first and second) angle towards a recess of the opposite side, in a direction away from an open end (in a direction looking into the page of figure 1) of the isolation channel (see below).



### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. (U.S. Patent No. 2,503,951), in view of Hunter (U.S. Patent No. 867,275).

Art Unit: 3722

Kelly et al. teaches a rotatable cutting tool as set forth in the above rejection. Furthermore, Kelly et al. teaches a tapered pin (leaf bending element) (19) adjustable within the chamfered/tapered bore (18) of the isolating channel (i.e. the channel is on diametrically opposing sides of the pin/tapered bore as shown in figure 5) for elastically bending the leaf from a relaxed position to a clamping position wherein the first wall clamps the insert against the second wall. It is clear from figure 1 and 5, that the diameter of the pin head (19) is larger than a width of the isolating channel.

However, Kelly et al. fails to teach the leaf bending element being a screw that engages a threaded hole in the tool.

Hunter teaches a tool body (2) for a rotatable cutting tool having at least one tooth socket/recess (3) with a first and second opposing walls for releasably retaining a replaceable cutter/insert (7 with exposed cutting edge), an isolating channel (14) spaced from the recess to define an elastically deformable leaf there between, wherein the first wall of the recess is formed by the leaf. Hunter also teaches taper headed screw (15) engaging a threaded hole in the tool body as well as chamfer at the open end of the channel (14) (see figures 1, 3 and 6). Regarding claim 25, hunter teaches in figure 4, tapered isolation channel (14) (i.e. inclined at a shallow angle) that causes the base of the leaf to be narrower than that it's portion near the top (near the open end).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kelly et al.'s invention such that the tapered pin is replaced by a taper headed screws and is received within a chamfered slot as

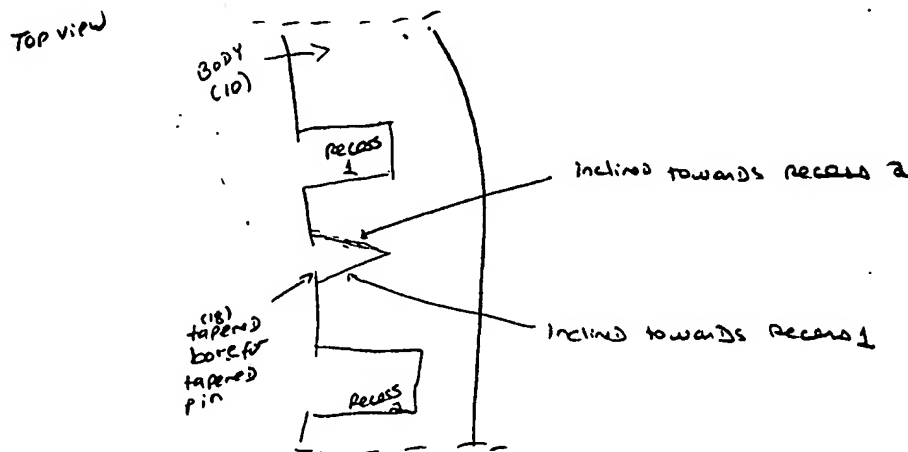
Art Unit: 3722

taught by Hunter for the purpose of having a positive engagement between the screw and the tool body (the pin may have the tendency to pop out).

### ***Response to Arguments***

Applicant's arguments filed 1/6/06 have been fully considered but they are not persuasive.

Regarding Claim 22, Applicant argues on page 6 lines 19-21, that "there is no disclosure or suggestion in Kelly of an isolation channel that is inclined to approach the recess in a direction away from the open end of the isolation channel", Examiner respectfully disagrees. As shown in the previous Office Action (mailed 8/25/05), reading the claim broadly, Kelly et al. teaches tapered bore (18) which is part of the isolation channel (17), the isolation channel being made up of tapered/inclined surfaces (see figure below) therefore each side of the taper is inclined at a shallow angle towards a recess of the opposite side, in a direction away from an open end (in a direction looking into the page of figure 1) of the isolation channel (see below).



In response to applicant's argument (page 7, last paragraph, lines 4-7) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kelly et al.'s pin may be in a tapered bore but there is nothing preventing it from pulling out and it is well known in the art that threadings are one sure way of fixing two items in a desired position.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3722

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara Addisu  
(571)272-6082

SA  
4/17/06

  
BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER